REPORT OF THE CIVIL AERONAUTICS BOARD on the Investigation of an Accident Involving Aircraft During a Local Instruction Flight

Instructor Edward Joseph Hodde and his student, Dean Kenneth Ellison, were fatally injured in an accident which occurred approximately  $2\frac{1}{2}$  miles south of the Municipal Airport, Las Vegas, New Mexico, about 12:55 p.m. on November 2, 1943. Hodde, age 32, held a commercial pilot certificate with single-engine land, O-8C h.p., and flight instructor ratings. He had flown approximately 456 solo hours, 322 of which were in the type airplane involved. Ellison, a War Training Service Neval trainee, had flown approximately 22 dual and 7 solo hours. The aircraft, a Taylorcraft EC12-65, NC 33907, owned by the Defense Plant Corporation and being operated by Bible's Flying Service, was demolished.

Hodde and Ellison, equipped with parachutes, took off from the Municipal Airport about 12:40 p.m. on a local instruction flight. Approximately 10 minutes later another instructor observed the aircraft in a spin. Recovery was effected around 2000 feet above the terrain and when last seen by him the plane was climbing normally. It was next observed by a ranch hand at an estimated altitude of about 3000 feet, in a spin. He stated that when the plane had completed about three turns of a right spin, "the tail seemed to come down and it started turning slower." After making six or more turns it disappeared behind rising terrain and a cloud of dust was seen to rise from the scene of the accident. The ranch hand stated that he watched planes practicing spins almost daily and that while the start of the spin in question appeared normal, "it flattened out and the tail came down and it turned slower. This is the first one I have seen do this slow turning spin."

Examination of the wreckage disclosed no evidence of failure of any part of the aircraft prior to the accident. There was no indication that the aircraft had moved from the point of impact. Some evidence of rotation to the right was indicated by the condition of the right wing and distortion of the fuselage. It is evident that the airplane struck the ground flatly, with the right wing and nose down at an angle of about 100. The landing gear and lower half of the cabin members of the fuselage were collapsed in a manner that indicated vertical descent of the airplane while it was spinning in a comparatively level attitude. The engine crankcase was partially imbedded in the ground and at the same relative angle as the cabin. The manner in which the propeller was broken indicated that little or no power was being developed at the time of impact. The extent of damage was such that it was impossible to determine whether the elevator and rudder controls had been rigged in a manner that would have contributed to the spin, or whether the simplane loading conditions were within the most rearward center of gravity limitations. The weather was ideal for contact flying and the fuel supply was ample. in the vicinity of the accident (6800 feet above sea level) was suitable for a safe landing. There was no indication that either the instructor or student had made an attempt to use their parachutes.

The probable cause of this accident was the undetermined condition caused the airplane to spin in a comparatively flat attitude, from which pilot was unable to recover before impact with the ground.

BY THE BOARD

/s/ Fred A. Tocmbs
Secretary